Date:

Thursday, 02/10/2008 10:34:27 AM

Julie Lecoca User:

# **Process Sheet**

Customer

: CU-DAR001 Dart Helicopters Services

S.O. No. :

: 42410

Job Number **Estimate Number** 

: 10089

P.O. Number

This Issue

: 02/10/2008 : NC

: //

: 42200

Type : PURCHASED PARTS

Part Number

**Drawing Name** 

**Drawing Number** 

: D312123 : D3121 REVE

: BEARING

**Project Number** 

: N/A

**Drawing Revision** 

Material

Due Date

: 10/10/2008

Qty:

100 Um:

Each

Written By

Prsht Rev.

First Issue

**Previous Run** 

Checked & Approved By

Comment

04.02.19

KJ/DS

Est Rev:B ECN 1060 07-11-12 DD verified by:EC

**Additional Product** 

Job Number:



Seq. #:

**Machine Or Operation:** 

Description:

CL08/10/02

100

1.0 PG

PURCHASING



Comment: PURCHASING

6900ZZ

Issue P/O: 7298

Bearing as per Dwg D3121

Possible Supplier: SKF P/N: 61900-2Z or KML P/N: 6900-ZZ

Material release note is required

Bearing



Comment: Qty.:

1.0000 Each(s)/Unit Total:

100.0000 Each(s)

Bearing

3.0

2.0

PACKAGING 1

PACKAGING RESOURCE #1





Comment: PACKAGING RESOURCE #1

Receive & Inspect for Transit Damage Ensure Material Release Note is attached

4.0 QC6

Comment: DIMENSIONAL CHECK

Inspect diimensions as per Dwg D3121 and attached certfication Dwg Rev C

5.0

PACKAGING RESOURCE #1





Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:



# **Dart Aerospace Ltd**

<b>D</b> ail ( 710)	oopaoo									
W/O:			We	ORK ORDER CHANG	ES					
DATE STEP		PROCEDURE CHANGE				Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		•								
										·
Part No	<b>.</b>	PAR #:	Fault Cate	gory:	_ NCR:	Yes N	lo <b>DQ</b>	A:	Date:	
	Re	esolution:	Disposition	n:	_ QA: I	V/C Clo	sed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	ANCE	(NCR)		,		
DATE	STEP	Description of NC Section A	Initial	Corrective Action Section Action Description	ion B	Sign &		cation on C	Approval Chief Eng	Approval QC Inspector
		Section A	Chief Eng	Chief Eng		Date	Secu	On C	Offier Eng	QC Inspector
							ļ.			
				•	; ; ;					
	1				1				1	

NOTE: Date & initial all entries

Date:

Thursday, 02/10/2008 10:34:27 AM

User:

**Process Sheet** 

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARING

Job Number: 42410

Julie Lecocq

Part Number: D312123

Job Number:



Seq. #:

**Machine Or Operation:** 

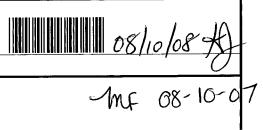
Description:

6.0

QC21

FINAL INSPECTION/W/O RELEASE





Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



# **Dart Aerospace Ltd**

	· Johaso								
W/O:			W	ORK ORDER CHANG	GES				
DATE STEP		PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No <b>DQ</b>	A:	Date: _	<u> </u>
	Re	solution:	Dispositio	n:	QA: N/C C	losed:		Date: _	
NCR:		,	WORK ORD	ER NON-CONFORM	ANCE (NC	₹)			
DATE	STEP	Description of NC	Corrective Action Section			Sign & Verification		Approval	Approval
	OIL.	Section A	Initial Chief Eng	Action Description Chief Eng	Date		Section C	Chief Eng	QC Inspector

NOTE: Date & initial all entries

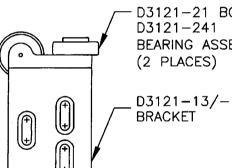


DESIGN DRAWN BY		DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CANADA	
CHEC	KED	APPROVED	DRAWING NO.	REV. E
	911	TAN		SHEET 1 OF 10
DATE			TITLE	SCALE
07.1	1.07		BRACKET ASSEMBLY	1:2
Α		02.04.15	NEW ISSUE	
В		03.01.16	ADD RIDGES; ADD MAT'L PROP ADD -141/-143/-144/-145	; FIX P/N /-146
С		04.02.17	ADD CLEARANCE; USE -241 E	BEARING
D		06.05.17	D3121-25 CAP WAS 1.024, N	OW 1.000
E		07.11.07	ADD TOLERANCE TO 0.032 (DE	TAIL B)

D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1)
D3121-11 BRACKET

## D3121-041 BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-33)

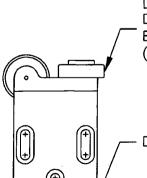


D3121-21 BOLT (1) BEARING ASSEMBLY (1)

D3121-13/-14

## D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-15/-16 BRACKET

## D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

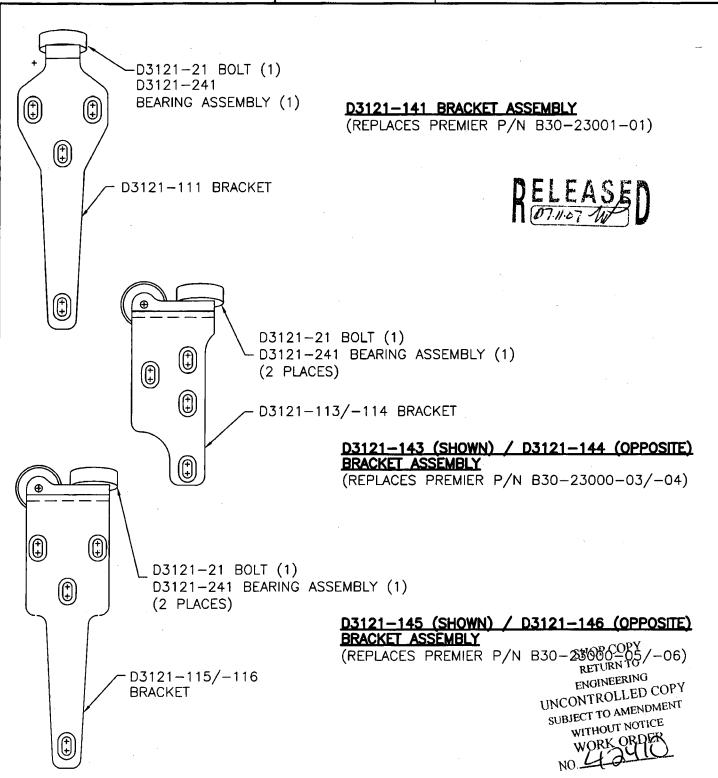
(REPLACES PREMIER P/N B30-23000-35/-36)

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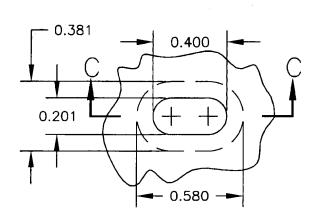
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4	-	D3121	SHEET 2 OF 10
DATE		TITLE	SCALE
07.11.07	* .	BRACKET ASSEMBLY	1:2

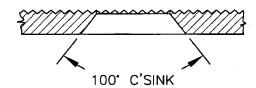




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	4	<b>-#</b>	D3121	SHEET 3 OF 10
	DATE		TITLE	SCALE
i	07.11.07		BRACKET ASSEMBLY	1:1

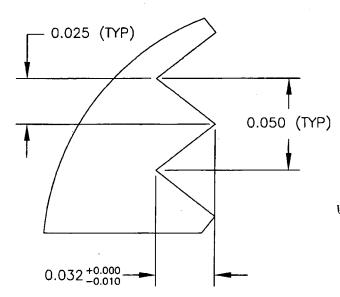






SECTION C-C

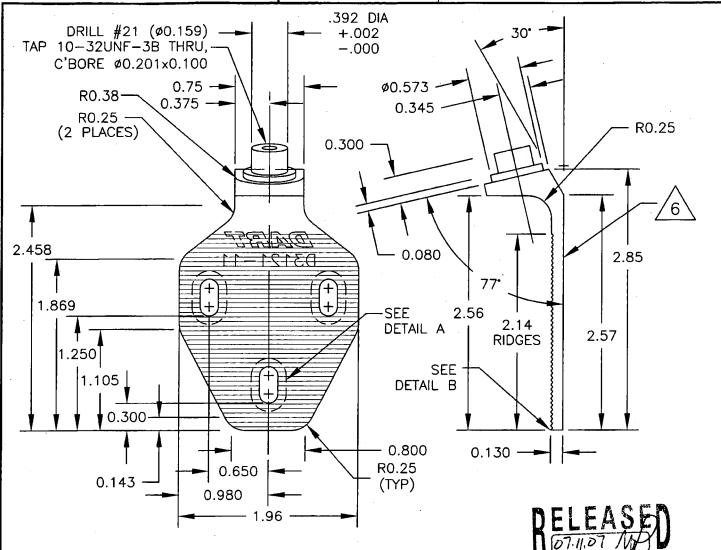
# **DETAIL B:** RIDGE DETAIL PARTIAL SECTION **SCALE 1:20**



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DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:1



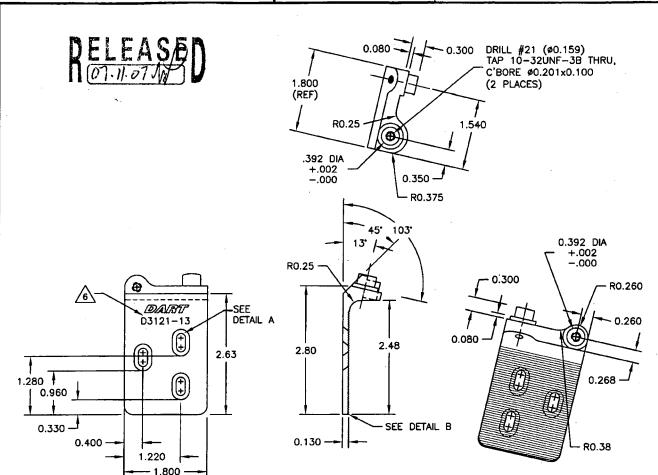
#### **D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY RETURN TO **ENGINEERING** UNCONTROLLED COPY SUBJECT TO AMENDMENT



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4	<del>-#</del>	D3121	SHEET 5 OF 10	
DATE		TITLE	SCALE	
07.11.07		BRACKET ASSEMBLY	1:2	



## D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)

MIN ULTIMATE TENSILE STRENGTH = 150 ksi

MIN YIELD TENSILE STRENGTH = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N & LOGO AS SHOWN

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY **RETURN TO ENGINEERING** 

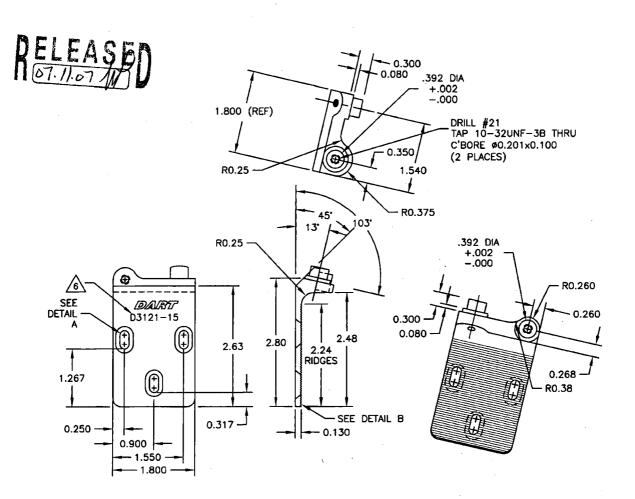
UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE



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4H	9	D3121	SHEET 6 OF 10
DATE	<del>- '</del>	TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



## D3121-15 BRACKET (SHOWN) D3121-16 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

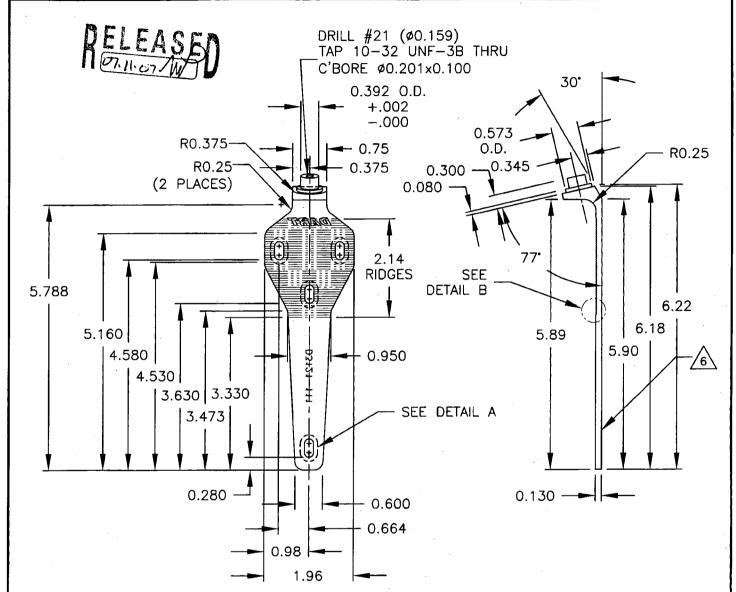
5) ENGRAVE DART P/N AND LOGO AS SHOWN

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT



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4#		D3121	SHEET 7 OF 10	
DATE	<del></del>	TITLE	SCALE	
07.11.07		BRACKET ASSEMBLY	1:2	



#### D3121-111 BRACKET

1) REPLACES PREMIER P/N B32-23001-11

2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi

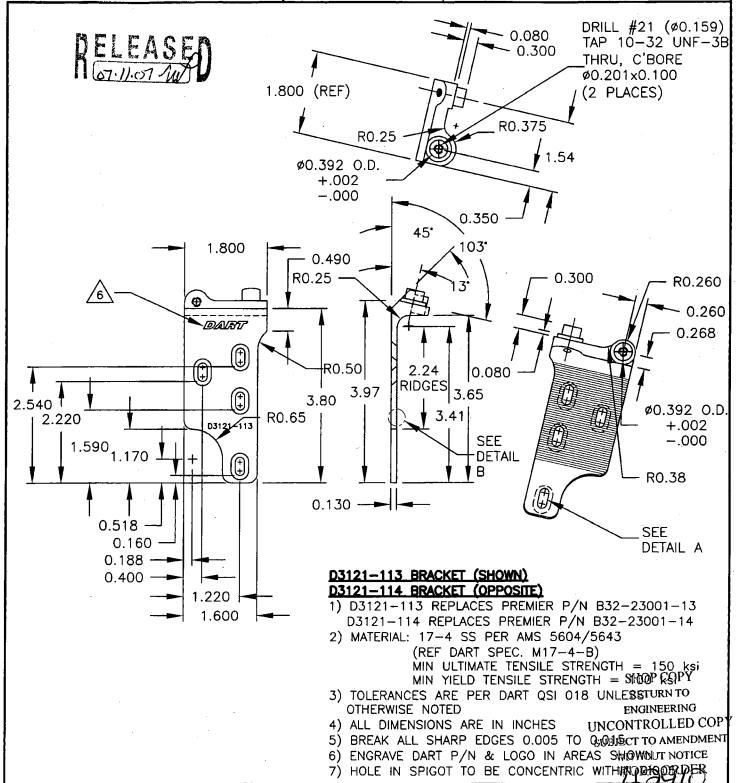
MIN YIELD TENSILE = 100 ksi

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE



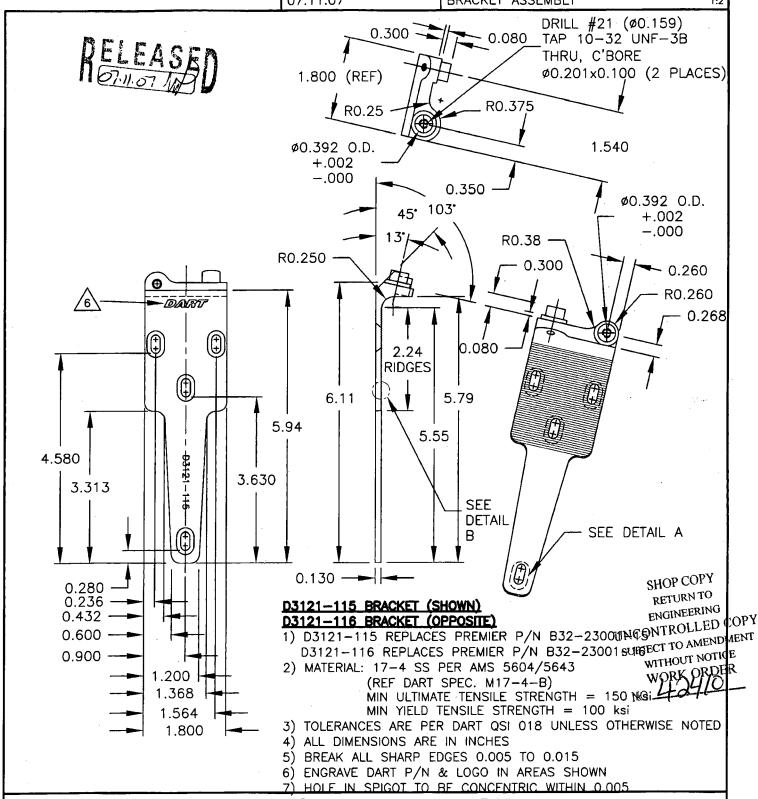
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#	-#	D3121	SHEET 8 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



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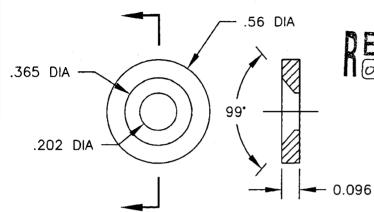
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
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417		D3121	SHEET 9 OF 10	
DATE		TITLE	SCALE	
07.11.07	•	BRACKET ASSEMBLY	1:2	



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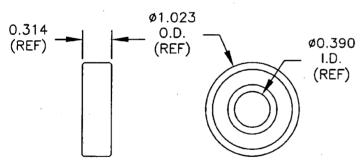


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I #	<b>-</b>	D3121	SHEET 10 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBL	Y 1:1



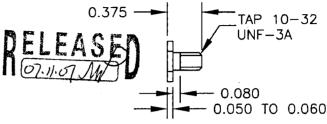
#### D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



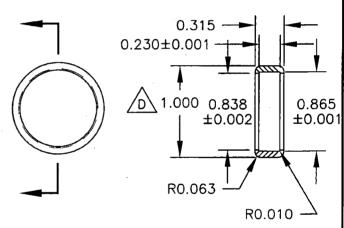
#### D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



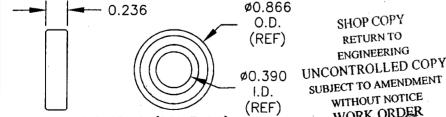
## D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX. ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

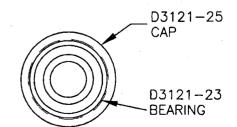


### D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



WITHOUT NOTICE WORK ORDER



D3121-23 BEARING (SCALE 1:1) 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z NO..

OR KML P/N 6900-ZZ

D3121-241 BEARING ASSEBLY (SCALE 1:1)

ALL DIMENSIONS ARE IN INCHES

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IDANATO

GENERAL BEARING SERVIC

386 MAIN ST E, HANKESBURY, ONTARIO KSA 1A8 (613) 632-9914

ORDER DATE: OCT 6, 2008

GST # R101979094

GENERAL BEARING SERVICE

SOLD TO: DART AEROSPACE LTD. 1270, ABERDEEN STREET HANKESBURY, ON.

VLO\_INT

SALE MADE BY: DR SHIP VIA:

CUSTOMER ORDER #: 00007298

. PST LICENCE: 6122-5207.

PRODUCT | DESCRIPTION | SOLD | SHIP | PRICE | EXTENSION | 6980-27 | BALL BEARING | 100 | 180 | 4.89 | 6.S.T. 24.45

costulo?

PACKING SLIP NO: 683767-0

1210010